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# Research paper



# Do my students think I am racist? Effects on teacher self-efficacy, stress, job satisfaction and supporting students in culturally diverse classrooms<sup>☆</sup>

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#### ABSTRACT

Schools are an important context of intergroup contact between culturally diverse teachers and students, where intergroup anxiety may occur. Using survey data from school teachers in Germany, this study aimed to extend research on intergroup anxiety by investigating the concern about appearing racist as a potential risk factor for teachers' well-being and functioning in culturally diverse classrooms. The findings suggest that teachers who are more concerned about appearing racist also experience more stress and less self-efficacy teaching in culturally diverse classrooms. This can reduce their job satisfaction, and also affect their ability to support their students' needs in the classroom.

# 1. Introduction

More than one third of students in Germany are of immigrant descent (37%, Statistisches Bundesamt, 2022), making schools an important setting of intergroup contact between teachers and students. However, teachers often have low levels of cultural diversity related self-efficacy and do not feel adequately prepared to work in culturally diverse schools (Gay, 2018). When interacting with students of a different cultural background than their own, teachers may be concerned that what they say or do may lead to their students perceiving and evaluating them as racist (Godsil & Richardson, 2017). This has been termed racial anxiety (Godsil & Richardson, 2017) or the concern about appearing racist (Tropp & Rucinski, 2022), and is a specific form of intergroup anxiety (Stephan, 2014).

Beginning with research on US school desegregation in the 1980s (Stephan & Stephan, 1985), a large body of research focuses on the phenomenon that people feel more anxious and concerned when interacting with members of an "out-group" than with members of their "in-group" (for a review see Stephan, 2014). The concern about

appearing racist is a specific form of intergroup anxiety that can occur both before and during intergroup interactions, and describes the worry that one will be perceived as racist (Godsil et al., 2014). In line with the notion of intergroup anxiety, previous US-based research has linked concern about appearing racist to physiological, affective, cognitive and behavioral consequences, such as physiological stress reactions, feelings of stress and anxiety, increased monitoring and vigilance, depleted cognitive resources, and fewer and lower-quality intergroup interactions (for a review, see Godsil & Richardson, 2017; Stephan, 2014).

While there is a growing body of international research focusing on new challenges and opportunities that arise for teachers in culturally diverse classrooms (e.g., Dubbeld et al., 2019; Gay, 2018), and much research has established that intergroup contact can reduce intergroup anxiety in and outside of culturally diverse classrooms (Pettigrew and Tropp, 2008; Tropp & Rucinski, 2022), the concern about appearing racist as a specific form of intergroup anxiety and its impact on teachers and students have not been studied extensively yet. First research among teachers in the US has shown that the concern about appearing racist can result in negative experiences for teachers and students alike (Godsil

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<sup>&</sup>lt;sup>1</sup> "Students of immigrant descent" is used to describe students, who are *minoritized* by society (and school teachers), i.e. are viewed by others as being of immigrant, non-German background based on phenotype, culture or religion, and are thus structurally disadvantaged. Furthermore, we will use the word "culture" or "cultural backgrounds" to describe cultural, ethnic and racial differences and backgrounds of students and teachers.

et al., 2014; Tropp & Rucinski, 2022). For example, a study by Harber et al. (2012) found that White teachers in the US are hesitant to give critical feedback to Black and Latinx students out of worry of coming across as racist, thus impeding their students' growth by withholding necessary feedback for them to learn and improve. In the same vein, first results from Germany suggest that teachers' concern about being or appearing prejudiced may lead them to include more positive and less negative comments on essays of ethnic minority students than their ethnic majority peers (Nishen & Kessels, 2022).

Drawing on survey data from school teachers in Germany, the current study aims to investigate the affective consequences of the concern about appearing racist. International research has shown that cultural diversity related stress and self-efficacy are important facets of teachers' affective experience in culturally diverse classrooms (e.g., Glock et al., 2019; Gutentag et al., 2018). Studies from Europe, North America, Oceania and Israel show that stress and self-efficacy affect teachers' quality of teaching and relationships with their students (Caprara et al., 2003; Kyriacou, 1987; Skaalvik & Skaalvik, 2017). While stress impacts these outcomes negatively and can cause burnout in the long-term (Glock et al., 2019), higher self-efficacy levels of teachers have been associated with more effective teacher practices in the classroom (Zee & Koomen, 2016), better student educational outcomes (Tschannen-Moran & Hoy, 2001), higher levels of job satisfaction, lower levels of stress, and less burnout (Klassen & Chiu, 2010).

Due to the important implications teachers' stress and self-efficacy have for their well-being and functioning in and outside of classrooms, in the present study we focus on how the concern about appearing racist is related to teachers' affective experiences of stress and self-efficacy. Specifically, we examine cultural diversity related stress and selfefficacy, i.e. stress and self-efficacy with regard to teaching a culturally diverse student body. We aim to (1) investigate whether concern about appearing racist is associated with more cultural diversity related stress and lower cultural diversity related self-efficacy; and (2) test a process model that extends research on intergroup anxiety from immediate affective consequences to more general indicators of teacher functioning, by investigating whether in turn more cultural diversity related stress and lower cultural diversity related self-efficacy are associated with less job satisfaction and teachers' own assessment of providing less support of students' psychological needs for relatedness and autonomy (for our conceptual model see Fig. 1).

In the following, we first discuss the concern about appearing racist in the context of Germany and then argue for the expected associations in our conceptual model. We will first argue why we expect (1) concern about appearing racist to be related to cultural diversity related teacher outcomes, specifically cultural diversity related stress and self-efficacy. We will then argue, why we expect cultural diversity related stress and cultural diversity related self-efficacy to be related to more general indicators of teacher functioning, namely (2) job satisfaction, and (3) support of students' relatedness and autonomy.

# 1.1. Contextualization: Concern about appearing racist in Germany

The current study aims to extend predominantly US-based research on a form of intergroup anxiety, the concern about appearing racist, to the German context. There are ongoing discussions on historical and contemporary racism in both the US and Germany, yet the way the discourse takes place differs in some ways.

Due to Germany's historical legacy of the Holocaust as a racially motivated genocide, explicit discussions of "race" go against prevalent social norms and the word "race" is only used in connection with the racial ideologies associated with the Holocaust (Juang et al., 2021). Consequently, the development of racial identities, as is common in the US, is less likely in Germany; individuals rather develop racialized identities based on other significant social categories such as heritage culture, migration status or religion (Juang et al., 2021). However, these racialized identities function similarly to race in the US, as groups are disadvantaged or privileged based on these racialized identities (Foner, 2015). Accordingly, experiences related to race remain salient and are recognized by individuals and communities directly affected by racism in Germany, just as they are in the US. Nevertheless, it remains taboo to openly name and discuss race-related experiences in German mainstream society (Juang et al., 2021).

Regarding the discourse on racism, Germany intensely focuses on racism in the context of the Holocaust, which results in racism being limited to a specific group of right-wing extremists in a specific period in the past. This downplays the continuing significance of race and discounts ongoing contemporary racism, as well as the social inequalities it produces (El & Fereidooni, 2016; Roig, 2017). Moreover, it leads to racism in Germany often being equated to being a right-wing extremist (Seiffge-Krenke & Haid, 2012). In contrast, the US openly discusses race and recognizes its contemporary salience, but often there is a lack of connection between racism of the past and the present. Both contexts hinder understanding about how the past influences present and future racism

While there are differences in how the discourse on race and racism takes place, Germany is part of the international discourse on racism and people are concerned about appearing racist. The Black Lives Matter movement that started in the US lead to widespread anti-racism protests also in Germany (Deutsche Welle, 2020), and lead to a discussion of the racist mass shooting incidents within Germany (Die Zeit, 2020). Moreover, research from France, Italy and the Netherlands highlights the relevance of the concern about appearing racist for the European context (Bonnet, 2014; Bonnet & Caillault, 2015). In Germany, a study by the German Center for Integration and Migration Research shows that 53% of participants agree with the statement, that "nowadays you are labeled as a racist for every little thing" (DeZIM-Institut (Hg.), 2021), and underlines the importance of the concern about appearing racist also for the German context.

In conclusion, Germany's history that does not allow for the explicit discussion of "race", as well as its framing of racism in right-wing extremist terms, make it difficult for teachers and students in Germany to engage in important discussions around race and racism (Roig, 2017). Therefore, it is important to study teachers' concern about appearing racist specifically in the German context, where people may want to avoid being labeled as racist even more than in other national contexts.

# $1.2.\,$ Concern about appearing racist and cultural diversity related stress & self-efficacy

In light of increasingly culturally diverse schools and strong norms of being non-racist in Germany, Europe and world-wide, concern about appearing racist may be becoming increasingly common amongst teachers. Given the importance of stress and self-efficacy in the school context, in the present study we examine the possible effects of the concern about appearing racist on cultural diversity related stress and self-efficacy of teachers. Specifically, we expect that teachers who are more concerned about appearing racist will experience more cultural diversity related stress and less cultural diversity related self-efficacy. As the concern about appearing racist, like other forms of intergroup anxiety, can influence affect, cognition, physiology and behavior, the expected effects can be derived from previous literature and explained by underlying mechanisms of cognition and attentional bias as well as fewer and lower quality intergroup interactions and avoidance.

Concern about appearing racist may influence teachers' cognition

<sup>&</sup>lt;sup>2</sup> As intergroup anxiety can be experienced by anyone (Stephan, 2014) and in line with previous research (Tropp & Rucinski, 2022), we conceptualize the concern about appearing racist as something that not only White teachers can experience – but that any teacher (regardless of their background) can experience in today's diverse society.

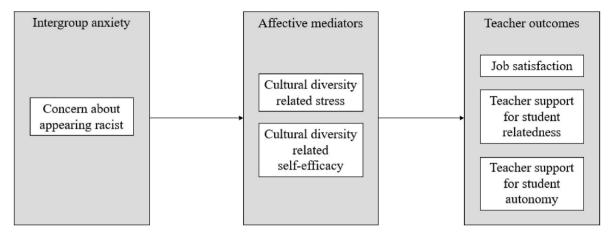


Fig. 1. Path model of the current study.

and lead to attentional bias. Specifically, during interactions with students of different cultural backgrounds than their own, teachers may be worried about being perceived as racist by their students and may thus constantly assess whether their students are evaluating them negatively or not (Murphy & Taylor, 2012). Empirical evidence suggests, that attending to threatening cues may activate the cortisol stress response (van Honk et al., 2000) and may play a causal role in exacerbating both anxiety and subsequent stress (MacLeod et al., 2002). Additionally, the constant vigilance and monitoring causes cognitive depletion (Godsil & Richardson, 2017). In line with cognitive load theory (Sweller, 1988), studies from the US and Israel have shown that cognitive depletion not only increases stress, but also decreases self-efficacy (Bishara, 2021; Feldon et al., 2018). Therefore, teachers who are more concerned about appearing racist may pay more attention to negative cues in intergroup interactions with students, which may cause them to experience more cultural diversity related stress and less cultural diversity related self-efficacy.

Additionally, concern about appearing racist has been linked to fewer and lower quality intergroup interactions and avoidance in the US (Godsil & Richardson, 2017) and in Italy (Stathi et al., 2020). Teachers' expectations about how students may perceive them (i.e. as racist), may influence their behavior and in turn also their students' behavior in a way that confirms teachers' initial expectations (Self-fulling prophecy, Merton, 1948; Word et al., 1974). For example, when a teacher interacts with a student of a different cultural background than their own, the teacher's fear of being perceived as racist may lead to non-verbal signals, such as an unfriendly verbal tone, avoiding eye-contact and physical distancing. These non-verbal signals may be perceived by the student as rejection based on their cultural background. In response, the student may send out non-verbal signals of discomfort - thereby confirming or even increasing the teacher's fear of being perceived as racist. Thus, concern about appearing racist may lead to low(er) quality intergroup interactions or to the teacher avoiding intergroup contact altogether. Unfortunately, avoiding intergroup contact altogether prevents teachers from making positive intergroup experiences that are key for developing a greater sense of cultural diversity related self-efficacy (Bandura, 1994).

In summary, previous literature suggests that the concern about appearing racist may influence teachers' everyday experiences in culturally diverse schools through cognition, attentional bias as well as fewer and lower quality intergroup interactions and avoidance. Therefore, we hypothesize that more concern about appearing racist is associated with more cultural diversity related stress (H1a) and lower cultural diversity related self-efficacy (H1b).

# 1.3. Cultural diversity related stress, self-efficacy and job satisfaction

In light of teacher shortages and increasing turnover rates across the globe, teacher job satisfaction has become a major concern in the educational context (Toropova et al., 2020). Teachers with low job satisfaction are more likely to leave their school and/or the profession in the long run (Dreer, 2021). Yet, little research has looked at how cultural diversity in school influences teachers' job satisfaction (e.g. Briones et al., 2010) and to our knowledge no research has looked into how in particular the concern about appearing racist is linked to job satisfaction. In the present study, we expect concern about appearing racist to be negatively related to job satisfaction by ways of cultural diversity related stress and self-efficacy.

Researchers have extensively studied the roles of stress and selfefficacy for job satisfaction (e.g., Collie et al., 2012). Not surprisingly, higher stress has been identified as a stable predictor of lower job satisfaction in Canadian and Norwegian teacher samples (Ferguson et al., 2012; Klassen & Chiu, 2010; Skaalvik & Skaalvik, 2007, 2011). Moreover, self-efficacy is linked to our need to feel competent (SDT; Ryan & Deci, 2000), and work needs to provide people with opportunities to feel and act competent for them to be satisfied with their job (Timms & Brough, 2013). Accordingly, research from Canada has shown that higher teacher self-efficacy is consistently associated with better psychological well-being, job commitment and job satisfaction (Collie et al., 2012; Klassen & Chiu, 2010). In line with this, a study by Caprara et al. (2003) found, that Italian high school teachers who felt that they were able to manage classroom difficulties and accomplish teaching tasks, reported greater value, happiness and satisfaction regarding the teaching profession. Taken together, we therefore hypothesize that more cultural diversity related stress (H2a) and less cultural diversity related self-efficacy (H2b) will be related to lower job satisfaction.

# 1.4. Cultural diversity related stress, self-efficacy and support of student

Much research has looked at the importance of teacher-student relationships, or how supportive teachers are of their students (for a meta-analysis, see Roorda et al., 2011). However, most research solely focuses on the valence of the teacher-student relationship and its effect on student outcomes. In our study, we extend current research by (1) focusing on the concern about appearing racist as a potential factor that may undermine teacher support of students via cultural diversity related stress and self-efficacy and (2) investigating teacher support concerning two universal human needs, specifically the needs for relatedness and autonomy (Nalipay et al., 2020; Ryan & Deci, 2000).

Self-determination theory (SDT; Ryan & Deci, 2000) states that there are three basic needs: relatedness, autonomy and competence.

Relatedness involves the desire for meaningful relationships with others, autonomy pertains to the need for self-direction in decision-making, while competence refers to feeling capable and effective in various endeavors. All three needs have to be satisfied in order to have good psychological health and personal well-being (Ryan & Deci, 2000). However, research shows that teachers can support students' need for competence through involvement (i.e. support for relatedness) and teaching strategies (i.e. support for autonomy) (Iglesias García et al., 2020; Sierens et al., 2009; Skinner et al., 1990). This suggests that teachers' support of students' competence will be influenced by the concern about appearing racist via teacher support of relatedness and autonomy. Therefore, the following study focuses solely on teachers' support of the needs for relatedness and autonomy.

Relatedness plays an important role for students' growth and academic performance (Furrer & Skinner, 2003), and from the US to Indonesia, studies have linked support of relatedness with greater belonging, motivation, academic engagement and academic performance of students (Maulana et al., 2016; Ryan & Deci, 2000), making teacher support of relatedness a vital factor in students' academic career and overall well-being. In addition, high support of student autonomy in the North American and European school contexts has been associated with more intrinsic motivation of students (Amoura et al., 2015; Sosic-Vasic et al., 2015), greater academic achievement (Taylor et al., 2014) and well-being (Amoura et al., 2015; Soenens & Vansteenkiste, 2010). Therefore, understanding whether concern about appearing racist could impede teacher support of students' relatedness and autonomy in the school context by way of cultural diversity related stress and self-efficacy is of high relevance.

Teachers can support their students' need for relatedness by developing high-quality teacher-student relationships through their interpersonal involvement with students (Ryan & Deci, 2000; Iglesias García et al., 2020). Yet, when teachers are experiencing lower levels of cultural diversity related self-efficacy and higher levels of cultural diversity related stress, the quality of interactions with their students likely suffers. For instance, research from Iran has shown that teachers with low self-efficacy are also more cynical towards their students (Khani & Mirzaee, 2015). Moreover, a study from Sweden shows, that when teachers experience stress, they are more likely to develop negative attitudes towards and interactions with their students (Ramberg et al., 2020). Lower self-efficacy and more stress are therefore likely associated with less positive student-teacher relationships. Thus, we expect lower cultural diversity related self-efficacy and higher cultural diversity related stress to undermine the need for relatedness in students.

In addition to supporting students' need for relatedness, teachers can support students' need for autonomy by promoting their feelings of volition and control (Reeve et al., 2003), for instance, by allowing students to follow their interests or conveying the relevance of teaching content (Iglesias García et al., 2020). We argue that teachers who feel more self-efficacious and less stressed in today's increasingly culturally diverse schools are also in a better position to support the autonomy of their students. Teachers with higher levels of self-efficacy and lower levels of stress are more likely to use autonomous teaching styles, while teachers with lower levels of self-efficacy and higher levels of stress are more likely to use controlling teaching styles (Zee & Koomen, 2016). This may be due to autonomy supportive teaching styles requiring more engagement form teachers (Braun et al., 2019; Larson et al., 2018) and being more resource-demanding (Skinner & Belmont, 1993). Therefore, it is likely that teachers experiencing more cultural diversity related stress and less cultural diversity related self-efficacy may use more controlling teaching styles as a coping response to regain control (Steptoe & Poole, 2016), thereby undermining students' need for autonomy.

In summary, we thus hypothesize that more cultural diversity related stress and less cultural diversity related self-efficacy will be associated with teachers' own assessments of providing less support of students' psychological needs for relatedness (H3a & H3b) and autonomy (H3c &

H3d).

#### 1.5. The current study

As more than one third of students in Germany are of immigrant descent (Statistisches Bundesamt, 2022), schools are an important setting of intergroup contact and possible intergroup anxiety between teachers and students. The current pre-registered study aims to add to research on a specific form of intergroup anxiety: the concern about appearing racist. We posit that the concern about appearing racist is as an important construct to understand both teacher and student functioning in culturally diverse classrooms. The current study extends predominantly US-based research on the concern about appearing racist to the German context, where race and racism, and the social inequalities it produces, are usually not openly talked about and where people may want to avoid being labeled as racist even more than in other national contexts. Drawing on survey data from N = 584 school teachers in Germany, we test a process model that extends research on intergroup anxiety, and specifically the concern about appearing racist, from immediate affective consequences to more general indicators of teacher functioning. We expect that teachers who are more concerned about appearing racist experience more cultural diversity related stress (H1a) and lower cultural diversity related self-efficacy (H1b). In turn, we expect that more cultural diversity related stress and less cultural diversity related self-efficacy are related to less job satisfaction (H2a & H2b) and to less teacher support of student relatedness and autonomy (H3a-d; Fig. 1). In addition, we will test for direct paths from concern about appearing racist to job satisfaction and to teacher support of student relatedness and autonomy, as well as for indirect paths via cultural diversity related stress and self-efficacy (mediation analyses).

# 2. 2 Method

# 2.1. Transparency and openness

We report how we determined our sample size, all data exclusions, all manipulations and all measures relevant to this study, and we follow Journal Article Reporting Standards (JARS; Kazak, 2018). Hypotheses, method and analysis plan were pre-registered before the end of data collection (https://osf.io/f67u5/?view\_only=7e32cfd4150e4e6e8 1b76f8e128ffd01). The data had not been accessed by any of the collaborators at the time of pre-registration. The data, materials and code that support the findings of this study are available from the corresponding author upon request.

# 2.2. Participants

Participants were teachers recruited via research seminars at a German university in the winter term 2020/21. As part of the seminars, pre-service teacher students participating in one of six seminar groups were required to contact a minimum of three in-service teachers in Germany to participate in our online survey. The in-service teachers were recruited through personal contacts of the students and invited to participate in an online questionnaire on cultural diversity in schools. Participation is the study was voluntary; the study participants gave their informed consent and could opt-out at any time. No imbursement for participation was given. Participants were required to teach in primary or secondary schools in Germany at the time of data collection.

The study sample included N=584 school teachers (75% female, 16% of immigrant descent) in Germany from all sixteen federal states, different regions and school types. Participants were between 23 and 65 years old, with an average age of M=43.75 years (SD=11.93). Despite the over-representation of East-German teachers in the sample (78% East-German sample vs. 13% East-German teachers on the population level), the demographic distribution of age, gender, immigrant descent, school location, public school teachers, and school types in our sample

supports its representativeness for German teachers. For a detailed comparison of the sample and population demographics, please refer to Supplemental Material A.

# 2.3. Materials and Procedure

The online questionnaire was part of a larger study on teachers' diversity-related beliefs and practices as well as general well-being and teaching-related outcomes. The questionnaire was drawn up in German. When validated translations of scales were not available, the given scale was translated into German by the principal investigators and discussed by a committee of bilingual experts to ensure that the translation captured the original meaning of the items. Moreover, the questionnaire was evaluated by over 100 pre-service teachers on relevance, clarity and comprehensiveness of items before data collection. Participants responded to all our continuous measures on a scale from 1 ('does not apply at all') to 5 ('applies completely'). Internal consistency of scales was established using confirmatory factor analyses and coefficient omega was calculated as an indicator of reliability (McDonald, 1999). CFA results are only reported for non-established scales or where a single factor was initially not supported. An overview of all items per measure can be found in Supplemental Material B.

Concern about appearing racist was measured with three items, ( $\omega = 0.81$ ; e.g., "I am concerned that students may think I am racist if I question students' views"; Tropp, 2017).

Cultural diversity related self-efficacy was measured with six items  $(\omega=0.84)$ . Five items belonged to Schachner and colleagues' (2015) scale of self-efficacy in multicultural classrooms (e.g. "I can adapt my teaching to the cultural diversity of the students"). We adapted the scale by adding one item of Civitillo et al.'s (2016) scale of self-efficacy to capture teacher-parent interactions: "I can communicate with parents of students whose mother tongue is not German". All items loaded on one factor, with factor loadings higher than 0.40.

Cultural diversity related stress was measured with four items ( $\omega=0.79$ ; e.g. "Dealing with students from different cultural backgrounds makes my job as a teacher more difficult", Civitillo et al., 2016; German adaptation of Tatar & Horenczyk, 2003). One item was dropped due to a factor loading smaller than 0.40.

Job satisfaction was measured with three items ( $\omega=0.83$ ; e.g. "I enjoy my work"; Collie et al., 2012).

Teacher support of student relatedness and teacher support of student autonomy were measured using a shortened version of the Teacher as Social Context Questionnaire (TASC; Iglesias García et al., 2020), selecting the five items with the highest factor loadings in the original study for each scale. Exemplary items were "When the students in my classes are not performing according to their ability, I take time to help them" for teacher support of student relatedness ( $\omega=.71$ ), and "I encourage the students in my classes to think about how the subject matter might be useful to them" for teacher support of student autonomy ( $\omega=0.61$ ). One additional item was dropped from the latter scale due to a factor loading smaller than 0.40.

#### 2.3.1. Covariates

With regard to the teachers' demographics, age, gender and immigrant descent were considered as potential co-variates. Immigrant descent of the teachers was determined based on whether they themselves or at least one parent or grandparent was born outside of Germany.<sup>3</sup> As we

know that intergroup contact can reduce intergroup anxiety and may therefore also reduce the concern about appearing racist (Pettigrew and Tropp, 2008; Tropp & Rucinski, 2022), we also considered teachers' estimate of the *percentage of students of immigrant descent* they teach (slider between 0 and 100%) and the number of their *intergroup friend-ships* (open question) as potential covariates.

# 2.4. Analytical Procedure

IBM SPSS Statistics for Windows (Version 28.0) was used for data cleaning, all other analyses where conducted using RStudio (Rstudio Team, 2022). Missing data was imputed using predictive mean matching (*mice* package). Bayesian structural equation modelling (bSEM) was employed using the *blavaan* package.

Prior to running the bSEM to test the hypothesized associations of the conceptual model, Bayesian correlations were run between the main study variables and possible covariates: age, gender, teachers' immigrant descent, percentage of students of immigrant descent, and intergroup friendships. Potential covariates that showed significant evidence of being correlated with the main study variables (Bayes factor greater than 1) were included as covariates in the bSEM.

Noninformative priors were chosen to reflect a state of prior ignorance regarding model parameters (Elster et al., 2015). In order to select significant bSEM associations, the credible intervals of regression coefficients were assessed. The 95% credible interval is more intuitively interpretable than the frequentist confidence intervals, and shows that there is a 95% probability that these regression coefficients in the population lie within the corresponding intervals (Kruschke, 2014). If 0 is not contained in the credibility interval it is likely there is an effect.

Model fit was assessed using the Bayesian information criteria (BIC), the Bayesian root mean square error of approximation (BRMSEA), the Bayesian comparative fit index (BCFI), the Bayesian Tucker-Lewis index (BTLI), the Bayesian normed fit index (BNFI), and the Laplace approximation to the log-Bayes factor (Merkle & Wang, 2018). Model fit is generally considered good with BRMSEA below 0.06, and BCFI, BTFI and BNFI greater than 0.90. Lower values of the BIC indicate better fit. The Laplace approximation compares the marginal likelihood of the data under model 2 (the *alternative hypothesis*) with the marginal likelihood of the data under model 1 (the *null hypothesis*). For the Laplace approximation, positive values favor the null hypothesis and negative values favor the alternative hypothesis.

In addition to testing our hypotheses, mediation analyses assessed full or partial mediation from concern about appearing racist to job satisfaction and teacher support of student relatedness and autonomy via cultural diversity related stress and self-efficacy. Mediations were tested using the *stanarm* package in R. Results can be found in Supplemental Material C.

# 3. Results

# 3.1. Descriptive results

The range, means and standard deviations of our main study variables are reported in Table 1. While overall teachers reported only a

**Table 1**Descriptive statistics.

	Range	M	SD	ω
Concern about appearing racist	1–5	2.2	0.8	.81
Cultural diversity related self-efficacy	1–5	3.5	0.6	.84
Cultural diversity related stress	1–5	2.3	0.8	.79
Job satisfaction	1–5	4.3	0.6	.83
Teacher support of student relatedness	1–5	4.12	0.5	.71
Teacher support of student autonomy	1–5	3.9	0.5	.61
% of students of immigrant descent	0-100	14.9	19.9	-
Intergroup friendships	0-100	2.6	6.1	-

<sup>&</sup>lt;sup>3</sup> The questionnaire was drawn up before the Federal Government Expert Commission (2021) recommendation to no longer differentiate between third generation immigrants and other Germans. As we only used one item to ask whether the person themselves or at least one parent or grandparent was born outside of Germany, we were not able to differentiate between 1st, 2nd and 3rd generation immigrants and therefore include 3rd generation immigrants in our definition of teachers of immigrant descent.

moderate concern about appearing racist, this descriptive finding still suggests that this is an issue that teachers in Germany face. Furthermore, on average teachers were moderately stressed about cultural diversity, and indicated moderate levels of cultural diversity related self-efficacy. Overall, teachers reported high job satisfaction as well as high levels of supporting their students' needs, both for relatedness and autonomy. The average estimated percentage of students of immigrant descent in the classroom and number of teachers' intergroup friendships reflect that the teachers in our sample have some intergroup contact both outside and inside of school.

An overview of the correlations between the main study variables and potential covariates can be found in Table 2. With regard to potential covariates, we found that a higher percentage of students of immigrant descent in class was associated with less concern about appearing racist and more cultural diversity related self-efficacy. In addition, having more intergroup friendships was related with less cultural diversity related stress and more cultural self-efficacy, job satisfaction and teacher support of students' needs for relatedness and autonomy. In contrast, age, gender and the teachers' own immigrant descent were not associated with any of our main study variables. Thus, only percentage of students of immigrant descent and intergroup friendship were included as covariates in the bSEM.

### 3.2. Structural equation model - model fit

The associations of the structural equation model (model 1) including standard deviation and credible intervals can be found in Supplemental Material D. In order to calculate incremental fit indices a default bSEM standard null model, the independence model, was fitted to the data and compared with subsequent models. However, model fit indices suggested that model 1 has an overall poor fit (Table 3). Therefore, a second model (model 2) including only the significant associations of model 1 was computed. The same uninformative priors as in model 1 were used as to not bias the results of model 2.

The BRMSEA indicates an acceptable fit and the BTLI, BNFI and BCFI a good fit for model 2 (Table 3). As BIC values of model 2 are smaller than those of model 1 and the null model ( $BIC_{\rm Null\ model}=29890.29$ ), model 2 should be preferred over model 1 and the null model. This is

also supported by the log-Bayes Factor, which indicates that while the null model is preferred over model 1, model 2 has a better fit than model 1 and the null model. Therefore, model 2 not only has an acceptable to good model fit, it also describes the data better than the null model or model 1 – and was thus treated as our final model. The associations of our final structural equation model (model 2) including standard deviations and credible intervals can be found in Table 4.

#### 3.3. Structural equation model – main results

As seen in Fig. 2, regression coefficients showed that teachers' concern about appearing racist was associated with more cultural diversity related stress and less cultural diversity related self-efficacy, thus confirming our H1a and H1b. While there was no significant direct association between cultural diversity related stress and job satisfaction, disconfirming our H2a, more cultural diversity related self-efficacy was linked to higher job satisfaction in teachers, thus supporting our H2b. Our hypotheses that teachers who are less self-efficacious and feel more stress in relation to cultural diversity, are also less supportive of students' needs for autonomy and relatedness were partly confirmed: More cultural diversity related stress was related to less teacher support of student autonomy, but unrelated to teacher support of student relatedness, thus supporting H3c but not H3a. More cultural diversity related self-efficacy was related to more teacher support of both student relatedness and autonomy, supporting both H3b and H3d.

#### 3.4. Covariates

With regard to our covariates, the results of the bSEM (model 2) show that teachers who had more students of immigrant descent in their class and more intergroup friendships also reported experiencing less concern about appearing racist, and more self-efficacy teaching in culturally diverse classrooms. In addition, more intergroup friendships were related to lower feelings of cultural diversity related stress in school.

**Table 2**Bayesian correlation table of study variables.

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
	r (BF)	r (BF)	r (BF)	r (BF)	r (BF)	r (BF)	r (BF)	r (BF)	r (BF)	r (BF)
Concern about appearing racist										_
Cultural diversity related self-efficacy     Cultural diversity related	20 (11095) .20 (5524)	32 (1.10								
stress		e+12)								
4. Job satisfaction	04(0.16)	.18 (701)	07 (0.48)							
<ol><li>Teacher support of relatedness</li></ol>	21 (16815)	.41 (1.44 e+21)	20 (13877)	.36 (4.65 e+15)						
6. Teacher support of autonomy	11 (3.17)	.31 (1.06 e+11)	28 (2.46 e+8)	.19 (3936)	.44 (3.68 e+25)					
7. Age	07 (0.33)	.04 (0.17)	.10 (0.51)	.01 (0.12)	.01 (0.12)	.05 (0.19)				
8. Gender	05 (0.18)	.04 (0.98)	.04 (0.14)	.06 (0.29)	.20 (6941)	.08 (0.49)	.09 (0.73)			
9. Immigrant descent	01 (0.10)	.07 (0.37)	01 (0.11)	.01 (0.10)	.06 (0.29)	.04 (0.14)	06 (0.22)	.00 (0.10)		
<ol><li>10. % Students of immigrant descent</li></ol>	14 (17.96)	.21 (15968)	00 (0.10)	00 (0.10)	.08 (0.76)	.07 (0.46)	09 (0.51)	02 (0.11)	.03 (0.14)	
11. Intergroup friendships	09 (0.82)	.20 (4962)	13 (9.76)	.09 (1.08)	.13 (7.78)	.13 (6.48)	15 (8.01)	05 (0.17)	.06 (0.24)	.09 (1.09)

Note. A BF greater than 1 indicates evidence for the H1 (there is an association between the two variables), while a BF lower than 1 indicates evidence for the H0 (there is no association). BF < 1/30 is strong evidence for the H0, BF < 1/10 is moderate evidence for the H0, and BF < 1/3 is weak evidence for the H0. BF > 3 is weak evidence for the H1, BF > 10 is moderate evidence for the H1, and BF > 30 is strong evidence for the H1. E + n denotes exponential notation, in which e (exponent) multiplies the preceding number by 10 to the nth power.

Table 3
Model fit indices and model comparison.

	Baseline model	BRMSEA	BTLI	BCFI	BNFI	BIC	log-Bayes Factor
Model 1	Null model	0.00	0.23	1.00	0.29	29877.08	56.83
Model 2	Null model	0.06	1.29	1.29	1.49	29822.99	-1.80
	Model 1	0.06	1.38	1.40	1.70	29822.99	-58.47

**Table 4**Regression coefficients of the model 2, including only significant paths of model 1.

Regression	Posterior estimate	Posterior SD	Credible interval
Concern about appearing racist			
Percentage in of students with a migration background	07	0.03	[12;01]
Intergroup friendships	09	0.04	[18;01]
Cultural diversity related self- efficacy			
Concern about appearing racist	12	0.04	[19;05]
Percentage in of students with a migration background	.11	0.02	[.07;.16]
Intergroup friendships	.14	0.03	[.08;.20]
Cultural diversity related stress			
Concern about appearing racist	.19	0.06	[.08;.30]
Intergroup friendships	19	0.05	[29;10]
Job satisfaction			
Cultural diversity related self- efficacy	.20	0.05	[.11;.29]
Teacher support of student relatedness			
Concern about appearing racist	06	0.02	[10;02]
Cultural diversity related self- efficacy	.31	0.04	[.24 ; .39]
Teacher support of student autonomy			
Cultural diversity related self- efficacy	.31	0.05	[.22;.41]
Cultural diversity related stress	06	0.03	[12;01]

Note. Significant paths are marked in bold.

# 3.5. Mediation analyses

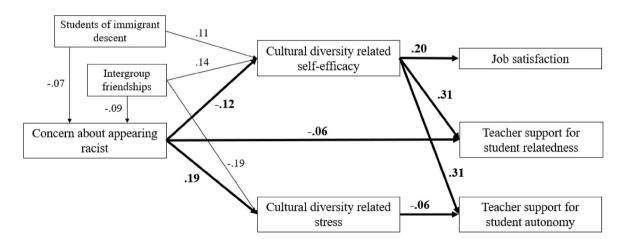
Subsequent mediation analyses showed that cultural diversity related self-efficacy acted as a partial mediator between concern about

appearing racist and teacher support of student relatedness and autonomy. Moreover, mediation analyses showed that cultural diversity related stress acted as a full mediator between concern about appearing racist and teacher support of student autonomy. Finally, while more concern about appearing racist was related to lower cultural diversity related self-efficacy and lower cultural diversity related self-efficacy was related to less job satisfaction, self-efficacy did not mediate the relationship between concern about appearing racist and job satisfaction.

#### 4. Discussion

As cultural diversity is increasing in society and in schools around the world, teachers interact more frequently with students of different cultural backgrounds and may thus also experience intergroup anxiety more frequently. In light of this, using survey data from school teachers in Germany, we investigated possible consequences of teachers' concern about appearing racist as one form of intergroup anxiety (Stephan, 2014), which is particularly relevant in the school context. Specifically, we looked at the associations of concern about appearing racist with teachers' cultural diversity related stress and self-efficacy, as important affective consequences of teachers in the school context. Furthermore, we examined more general indicators of teacher functioning, by investigating whether in turn more cultural diversity related stress and lower cultural diversity related self-efficacy are associated with less job satisfaction and less support of students' psychological needs for relatedness and autonomy.

Results indicate that teachers' concern about appearing racist when interacting with students is associated with negative outcomes for teachers themselves and the ability to support their students. As expected, teachers who are more concerned about appearing racist experienced more cultural diversity related stress (H1a) and less cultural diversity related self-efficacy (H1b). Furthermore, while cultural diversity related stress was not related to less job satisfaction (H2a),



*Note:* Includes only significant associations of model 1 and controls for percentage of students of immigrant descent and intergroup friendships. Paths between main study variables are shown with arrows in bold.

Fig. 2. Final Bayesian structural equation model (model 2). Note: Includes only significant associations of model 1 and controls for percentage of students of immigrant descent and intergroup friendships. Paths between main study variables are shown with arrows in bold.

teachers who felt less self-efficacious in culturally diverse classrooms, reported being less satisfied with their jobs (H2b). In regards to teacher support of student needs, cultural diversity related stress was not associated with support of students' needs for relatedness (H3a). However, when teachers felt less self-efficacious in culturally diverse classrooms, they also reported supporting students' needs for relatedness less (H3b), and self-efficacy mediated the relationship between more concern about appearing racist and less support of students' needs for relatedness. Lastly, when teachers experienced more concern about appearing racist, they also supported students' needs for autonomy less, which was mediated by an increase in cultural diversity related stress (H3c) and a decrease in cultural diversity related self-efficacy (H3d).

Adding to previous mostly US-based research on the concern about appearing racist (Godsil & Richardson, 2017; Tropp & Rucinski, 2022), our study shows that the concern about appearing racist is also a worry for teachers in Germany, a context in which race and racism are discussed mainly in the historical context of the Holocaust, and are not openly talked about as influencing present social inequalities. Further complementing US-based research on intergroup anxiety (Godsil et al., 2014; Stephan, 2014), the concern about appearing racist is indeed linked to negative affective experiences of stress and self-efficacy for teachers in Germany.

We add to the existing literature by showing that intergroup anxiety, and specifically the concern about appearing racist, is not just associated with an increase in general stress (Godsil & Richardson, 2017; Stephan, 2014), but is linked to *cultural diversity related* stress and self-efficacy. Furthermore, we extend research on intergroup anxiety to include not only the immediate affective consequences (in the context of diversity), but show that these affective consequences can translate into more general issues of teacher functioning. International research has robustly shown that teachers' stress and self-efficacy are important for both teachers' own well-being as well as their students (Caprara et al., 2003; Gutentag et al., 2018; Klassen & Chiu, 2010; Kyriacou, 1987; Tschannen-Moran & Hoy, 2001). The importance of stress and self-efficacy as relevant conditions for teachers and students could be replicated in the current study by showing implications for job satisfaction and teacher support of student needs.

Our study also adds to the growing body of literature showing that contrary to popular belief, it is not cultural diversity itself that negatively affects teachers, but rather their evaluations and perceptions of cultural diversity in the classroom and the worries associated with it (e. g. Gutentag et al., 2018). When teachers react to cultural diversity with worries of being evaluated as racist by their students, this evaluation rather than the presence of cultural diversity per se can have negative affective consequences such as increased stress and reduced self-efficacy, eventually affecting their functioning in the job as evidenced by lower job satisfaction and lower teacher support of student needs. Furthermore, our results suggest that the more students of immigrant descent teachers teach, the less they are concerned with appearing racist and the more culturally related self-efficacious they feel. Taken together, these findings are in line with intergroup contact theory (Allport, 1954; Pettigrew & Tropp, 2008) and research on the benefits of diversity in schools (Graham, 2018), showing that cultural diversity per se does not negatively affect teachers but on the contrary, is associated with positive outcomes. As classrooms are getting more diverse, this is an important finding relating to teachers experiences in the classroom and the evaluation of cultural diversity in schools.

Although contradictory to our expectations only cultural diversity related self-efficacy and not stress was related to job satisfaction, this further highlights the importance of self-efficacy for general teacher functioning and job satisfaction in particular. Indeed, previous research also found that self-efficacy predicts job satisfaction over and above stress (Caprara et al., 2003). However, taken together, our research findings suggest that concern about appearing racist and its associations with stress, self-efficacy and job satisfaction play a role in why teachers today are experiencing high levels of burn-out and early retirement in an

increasingly diverse school context (Dubbeld et al., 2019; Glock et al., 2019; Gutentag et al., 2018).

Furthermore, besides associations with teacher outcomes, concern about appearing racist is also linked with less teacher support of student autonomy through more cultural diversity related stress and less culturally diversity related self-efficacy, and to less teacher support of student relatedness through less cultural diversity related self-efficacy. This indicates that when experiencing more stress and lower self-efficacy out of concern about appearing racist, teachers may have more negative interactions and relationships with students (Godsil & Richardson, 2017) as well as use more controlling than autonomy supportive teaching practices in the classroom (Zee & Koomen, 2016). This can have detrimental effects on students, such as decreased student well-being, motivation, and academic achievement (Deci & Ryan, 2000, 2008; Soenens & Vansteenkiste, 2005, 2010).

Contradictory to our expectations, concern about appearing racist was not related to teacher support of student relatedness via increased cultural diversity related stress. This association suggests that while experiencing cultural diversity related stress, teachers do not perceive the student-teacher relationship to suffer. Teachers report being able to preserve a good relationship with their students even when they are under stress, and that they are still able to support the need for relatedness in students. This is in line with another study, that shows that teachers may even show more warmth towards their students when experiencing stress or burnout (Bottiani et al., 2019). This could suggest that teachers who experience stress may exhibit 'compensating' behavior, such as more warmth and care towards students. In contrast, most research with teacher data (e.g. Khani & Mirzaee, 2015; Skaalvik & Skaalvik, 2017) and teacher and student data (e.g. Ramberg et al., 2020) has shown, that teacher stress leads to lower-quality relationships with students. It is possible, that our findings, as well as those by Bottiani et al. (2019), are a result of an overestimation of teachers, as both studies include only self-assessments of teachers. Teachers have been found to evaluate the relationship to their students more positively than the students themselves. For example, a study by Brekelmans et al. (2011) with over 6000 Dutch teachers and reports of one class of their students each, shows that 66% of teachers overestimate the quality of their relationship with their students.

In sum, these findings highlight the need for more studies on intergroup anxiety and specifically the concern about appearing racist in the school context as it may have detrimental consequences for teachers and students. Concern about appearing racist appears to be associated with immediate affective consequences for teachers in Germany in the context of diversity, namely decreased diversity related self-efficacy and increased diversity related stress, which are important teacher outcomes. These may translate into more general issues of teacher functioning, specifically teachers being less satisfied with their jobs and being less able to support students' needs.

#### 4.1. Limitations and future research

Our study has some methodological limitations. First, our cross-sectional questionnaire study does not allow us to make any causal claims concerning the direction of effects. For example, it would be important to verify that concern about appearing racist reduces cultural diversity related self-efficacy, rather than a lack of cultural diversity related self-efficacy leaving teachers concerned about appearing racist. Moreover, many theorized associations (and their directionality) are based on physiological and behavioral processes, which we were not able to assess using a survey. To address this shortcoming, future research should investigate longitudinal relations amongst these variables, as well as use additional experimental methods, in order to investigate the underlying processes, that we expect explain the associations between concern about appearing racist and other outcomes. This could include measuring teachers' physiological stress via salivary cortisol levels or using video observations to capture teacher-student

interactions in situations in which they are concerned vs. not concerned about appearing racist. Longitudinal and experimental studies can also provide knowledge on where to initiate effective interventions to break the chain from, for instance, being more concerned about appearing racist to lower teacher self-efficacy or support of student needs.

However, as stated earlier, the concern about appearing is related to (negative) feedback loops (Godsil & Richardson, 2017), where prior intergroup experiences and cognition (e.g. attentional bias, self-efficacy) likely influences the concern about appearing racist, and the concern about appearing racist also influences future intergroup experiences and cognition. This suggests that longitudinal studies would find bi-directional relationships between the concern about appearing racist and cultural diversity related self-efficacy, in which it is most effective to intervene with a two-pronged approach targeting both the reduction of the concern about appearing racist, as well as boosting cultural diversity related self-efficacy.

Another limitation of this study is that measures of teacher support of student needs showed only acceptable (rather than good) reliability. Future research should thus use the long version of the TASCQ measure (Iglesias García et al., 2020) to test which items work best in the German context or use an alternative measure with better reliability in this context.

Additionally, this study only measured teachers' own assessment on how they were supporting student needs for relatedness and autonomy. Going beyond teacher perceptions and controlling for teachers' possible overestimation of the quality of the relationship with their students, future research should assess to what extent the students themselves perceive that their need for relatedness and autonomy is supported by their teacher and whether these student perceptions are linked to teacher-reported concerns about appearing racist. Moreover, it would be important to investigate whether the impact of the concern about appearing racist on teachers' support of student needs vary between students based on their immigrant descent. If teachers experience more concern about appearing racist when interacting with students of immigrant descent and thus support students of immigrant descent less than their peers, this can negatively impact their well-being and academic engagement, and further widen the achievement gap between students of different cultural backgrounds (Harber et al., 2012).

Lastly, our sample includes teachers from all sixteen German federal states and is representative for German teachers in regards to most demographic features. Due to the location of the principal investigators there is an over-representation of East-German teachers in the sample. Yet, as intergroup anxiety and its consequences describe general psychological processes not limited to specific cultures or countries (Stephan, 2014), we do not expect our results to differ between teachers from East- and West-Germany.

# 4.2. Implications for reducing concern about appearing racist

A promising avenue for future research to influence the school experiences of teachers and thus address their concern about appearing racist may be positive intergroup contact (Allport, 1954). There is a robust line of research showing that positive intergroup contact in and outside the school context is an important intervention point to alleviate intergroup anxiety (Godsil et al., 2014; Godsil & Richardson, 2017; Stephan, 2014), as it enhances knowledge about the other group, reduces anxiety about future intergroup contact, and increases perspective taking and empathy (Pettigrew & Tropp, 2008). Research on intergroup anxiety has found, that having outgroup friends, i.e. frequent and mostly equal status intergroup contact, is related to lower anxiety (Stephan, 2014). This is also supported by the findings from the current study, indicating that more intergroup friendships are associated with lower levels of concern about appearing racist. Thus, positive intergroup experiences, also beyond the somewhat hierarchical contact they have with their students, may play a key role in reducing teachers' concern about appearing racist.

In line with this, incorporating more intergroup contact into teacher training and the education system could be a powerful tool to reduce concern about appearing racist in teachers. This could be done either through mandatory internships in culturally diverse schools (Emmanuel, 2005), promoting studying abroad more within teacher education (Sharma, 2020), or thought exercises in which positive intergroup contact is imagined (Di Bernado et al., 2017). More opportunities for intergroup contact of teachers would also exist if educational segregation was reduced already at school level, and also if there were more teachers of color. In Germany, students of immigrant descent are underrepresented in the academic school track, in universities, and only 8% of teachers in Germany are of immigrant descent (Statistisches Bundesamt, 2022). By desegregating school systems, but also tackling educational inequality and promoting the teacher profession amongst students of color and/or of immigrant descent, teachers would have more intergroup contact throughout their studies at school and university, as well as amongst their teacher colleagues, and not only through contact with students at culturally diverse schools.

Furthermore, restructuring teacher training at university and beyond could also change the contextual factors influencing intergroup contact (Stephan, 2014) and further decrease teachers' concern about appearing racist. A lack of familiarity with the context and feelings of uncertainty were found to be important situational factors that can increase intergroup anxiety (Stephan, 2014); and, from previous research we know that teachers often do not feel adequately prepared to teach in culturally diverse schools (Gay, 2018). Therefore, including more content about cultural diversity in the training for (pre-service) teachers, may reduce teachers' concern about appearing racist. For example, a study by Avery et al. (2009) found that intergroup anxiety was reduced in structured interactions with clearly defined roles and expectations. When teachers enter intergroup contact situations feeling adequately prepared, this may also lead to more positive intergroup contact, which in turn could further reduce their concern about appearing racist (Pettigrew & Tropp, 2008; Stephan, 2014). Thus, by addressing cultural diversity in teacher trainings, the personal experiences of teachers and contextual factors of intergroup contact could be changed to further reduce the concern about appearing racist.

However, eliminating the concern about appearing racist may not be the only solution. Our measure of concern about appearing racist does not investigate whether teachers are concerned about appearing racist out of genuine concern of harming someone or out of fear of being labeled racist. Future research should look into the underlying reasons as to why teachers are concerned about appearing racist, and whether the reasons qualify the negative impact this concern can have on, for instance, how stressed or self-efficacious teachers feel in culturally diverse classrooms. To some extent, concern about appearing racist may reflect that teachers are aware of racism and that they could (unintentionally) engage in racist acts; and, such an awareness for racism among teachers matters for addressing and combating racism in schools and society (Heberle et al., 2020).

Therefore, understanding the reasons behind being concerned about appearing racist may help design interventions to change concern about appearing racist from a destructive worry that negatively influences teacher well-being, job satisfaction and teacher-student interactions, into a constructive motivation to challenge structural racial inequities in our school systems. Changing teachers attitudes and related cognitions on topics of racism, bias and White privilege may reduce the negative consequences of the concern about appearing racist (Stephan, 2014), without eliminating the concern itself. One promising field may be research on critical consciousness, which shows that greater awareness on topics of White privilege and racism can translate into constructive motivation to challenge racial inequities, such as greater support for affirmative action (for a review, see Heberle et al., 2020). This is complimented by research on intergroup anxiety, which has shown that programs for enhancing the awareness of implicit bias, including discussing concerns regarding the effects of bias as well as strategies to

reduce bias, managed to successfully reduce implicit racial prejudice (Devine et al., 2012). Discussing the effects of implicit bias and learning anti-racist teaching strategies (e.g. grading anonymously) may consequently lessen teachers concern about appearing racist by increasing their self-efficacy in culturally diverse classrooms, while simultaneously reducing teaching practices that enhance educational inequities. Therefore, openly talking about structural racism and consequently also talking about concerns about appearing racist may help bypass its detrimental effects and channel it into actions against racism and structures of inequality in our school systems.

# 5. Conclusion

In conclusion, our findings highlight the importance of studying concern about appearing racist also in school contexts where race and racism are not openly discussed, such as Germany, as they may contribute to social inequities in society today. The study sheds light on how intergroup anxiety could have immediate affective consequences for teachers in the context of diversity, which could translate into more general issues of teacher functioning. Further research is needed to deepen our understanding of the specific mechanisms and long-term consequences associated with the concerns about appearing racist; such research would provide valuable insights into how this concern can potentially impact teachers and students and allow for the development of targeted strategies to mitigate its detrimental effects. Desegregating our school systems and reducing barriers preventing people of color and/or of immigrant descent from becoming teachers, can create more opportunities for positive intergroup contact on both student and teacher level. This, in turn, could potentially reduce concerns about appearing racist and help support both teachers' well-being and students' needs. Moreover, it is important to educate teachers on topics of White privilege and racism and create spaces to talk about the concern about appearing racist. Only then can we fully understand and utilize the concern about appearing racist in a productive way to become aware of and dismantle racism and systemic inequalities in the classroom and society.

# **Declaration of competing interest**

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors. We have no known conflict of interest to disclose.

# Data availability

Data will be made available on request.

# Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.tate.2023.104425.

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